

Work Order ID 98929

\*98929\*

Page 1

March-28-13 10:46:51 AM

647.9613

Item ID: 647.9613

898929

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: RH Aft Wiper Deflector

Stop \*NS2\*

Start Date: 4/01/13 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 4/01/13 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 13-04-01 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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647.9600

110

0.00

\*110\*

Outsource5

Outsource process - Machining

Memo

ISSUE P/O: 19893  
POSSIBLE SUPPLIER: ARCHER PRECISION.

Certificate of conformaty required

0.00

CL 13/05/13 (S)

115

Receive & Inspect for Damage & Mat'l Certs

0.00

\*115\*

Packaging

Packaging

Memo

0.00

5x

SP  
13-6-21

117

QC6- Inspect dimensions to drawing

0.00

\*117\*

QC

Quality Control

Memo

0.00

27  
13-6-24

3

2

D

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

# Work Order ID 98929

\*98929\*

Page 2

March-28-13 10:46:51 AM

Item ID: 647.9613

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: RH Aft Wiper Deflector

Stop \*NS2\*

Start Date: 4/01/13 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 4/01/13 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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118

0.00

\*118\*

HandFinish

Memo

0.00

Hand Finishing

REMOVE ALL PART MARKINGS

120

0.00

\*120\*

Outsource4

Memo

0.00

Outsource process - Anodize

HARD ANODIZE 1AW MIL-A-8625 TYPE 3  
COLOUR BLACK

130

Receive & Inspect for Damage & Mat'l Certs

0.00

\*130\*

Packaging

Memo

0.00

Packaging

\*\*\*IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV\*\*\*

3/24/13  
13/6/24

13/2/13  
PTO

PO 20377

13-06-28

13/2/13 (3)

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA *AK* Date: 13/07/13QA Closed: *AK* Date: 13-7-12

Work Order: <u>98929</u>	<b>DISPOSITION</b> Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>			
Part No. <u>647.9613</u>		Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input checked="" type="checkbox"/>	Engineering Quality <input type="checkbox"/> Other <input type="checkbox"/>
NCR No. <u>13-2853</u>					

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>	13/6/12	17	2	tip of part was unmachined QTY @ RC short stock RC supply	DAS 16 9-89 072042 13/6/12	Destroyed part	DAS 27 072042 13-6-12	DAS 16 9-89	DAS 16 9-89 072042 13/6/12
Equip/Tooling <input type="checkbox"/>						No replace			
Operator <input type="checkbox"/>						inform supply need			
Material <input type="checkbox"/>						Reason via Email			
Setup <input type="checkbox"/>						Reason			
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input checked="" type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

## FAULT CATEGORY

Landing Gear	General		
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mistread	<input type="checkbox"/> Power Loss/Surge
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Weld
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Wrong Stock Pulled
			<input type="checkbox"/> Other

# Work Order ID 98929

\*98929\*

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Item ID: 647.9613 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: RH Aft Wiper Deflector  
 Start Date: 4/01/13 Start Qty: 1.00 \*1\* Cust Item ID:  
 Required Date: 4/01/13 Req'd Qty: 1.00 \*1\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00		W/A					
150 *150* SprayPaint Spray Painting	Spray Painting per QSI005 4.2  Memo PRIME AS PER DWG NOTE #2	0.00  0.00		m125452					CY 13/07/10
160 *160* QC Quality Control	QC14- Inspect Spray Paint  6 Memo	0.00  0.00		137.10					3

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											

FAULT CATEGORY				
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

**Work Order ID 98929****\*98929\***

Page 4

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Item ID: 647.9613

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: RH Aft Wiper Deflector

Start Date: 4/01/13 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 4/01/13 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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170

Identify as per dwg &amp; Stock Location: \_\_\_\_\_

0.00

**\*170\***

Packaging

Memo

Styos

0.00

Packaging

13/7/14 (3)

190

QC21- Final Inspection - Work Order Release

0.00

**\*190\***

QC

Memo

0.00

Quality Control

13/7/14

13-07-11

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other



# Picklist Print

March-28-13 10:46:51 AM

Page 1

Work Order ID: 98929

Parent Item: 647.9613

Start Date: 4/01/13

Required Date: 4/01/13

Parent Item Name: RH Aft Wiper Deflector

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 12-11-19 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.9613P		Purchased	No				Each	0.0000					
RH Aft Wiper Deflector													
M7075T6B6.000X6.000		Purchased	No				f	17.8800					
7075-T6 BAR 6.000' X 6.000" (order in billets)										0.6357895			

## Location

## Loc Qty

## Loc Code

MAT001

17.88

124030

6

124393

11.88

~~6.558~~  
3.816 Fk 13/04/05

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

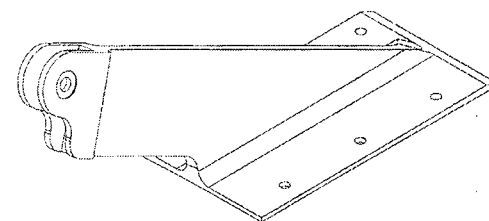
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

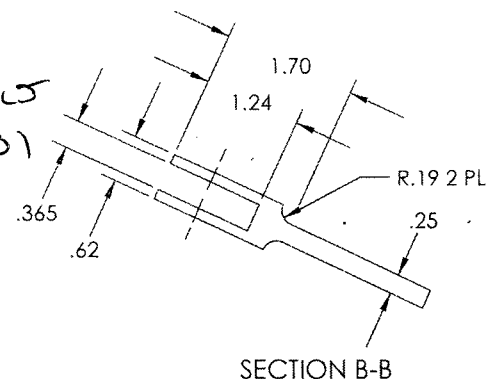
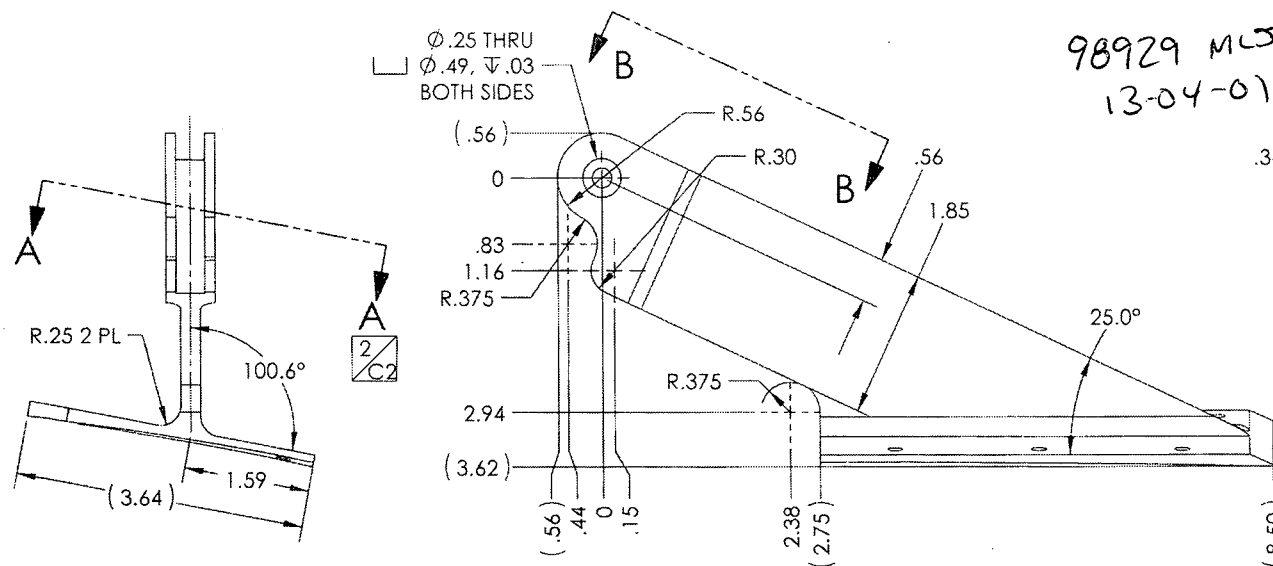
Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: ANODIZE PER MIL STD-A-8625, TYPE III, CLASS 2, COLOR BLACK;  
PRETREAT PRC-DESOTO PR-148 ADHESION PROMOTER;  
PRIME IAW MIL-P-23377J TYPE I CLASS N.
- 3 PART DIMENSIONS CONTROLLED BY CAD MODEL  
FILE NAME: 647.9610 NC LH FWD WIPER DEFLECTOR.SLDPRIT, LAST MODIFIED 06/30/10.
- 4 PART DIMENSIONS CONTROLLED BY CAD MODEL  
FILE NAME: 647.9611 NC LH AFT WIPER DEFLECTOR.SLDPRIT, LAST MODIFIED 06/30/10.
- 5 PART DIMENSIONS CONTROLLED BY CAD MODEL  
FILE NAME: 647.9612 NC RH FWD WIPER DEFLECTOR.SLDPRIT, LAST MODIFIED 06/30/10.
- 6 PART DIMENSIONS CONTROLLED BY CAD MODEL  
FILE NAME: 647.9613 NC RH AFT WIPER DEFLECTOR.SLDPRIT, LAST MODIFIED 06/30/10.
7. DEBURR AND BREAK ALL SHARP EDGES.
8. IDENTIFY IAW MPP-120. LASER ETCH P/N REVISION, 12 PT. CENTURY GOTHIC.



647.9610 SHOWN  
647.9612 OPPOSITE



		647.9613	RH AFT WIPER DEFLECTOR	1	1	1
		647.9612	RH FWD WIPER DEFLECTOR	1	1	1
		647.9611	LH AFT WIPER DEFLECTOR	1	1	1
		647.9610	LH FWD WIPER DEFLECTOR	1	1	1
QTY	FIND #	PART #	DESCRIPTION	MAT'L	SPEC.	
PARTS LIST						
NEXT ASSY (S)			APICAL INDUSTRIES			
647.8900			2608 TEMPLE HEIGHTS DR.			
			OCEANSIDE, CA. 92056-3512 (760)724-5300			
			WIPER DEFLECTOR			
			UNLESS OTHERWISE SPECIFIED			
			DIMENSIONS ARE IN INCHES			
			TOLERANCES ARE:			
			2 PLACE DECIMALS ±.01			
			3 PLACE DECIMALS ±.005			
			ANGLES ±.5°			
			SIZE (CASE CODE)	QTY. NO.	REV.	
			B	07/M15	647.9600	N/C
			SCALE	NONE	SHEET	1 OF 5

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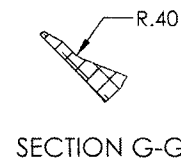
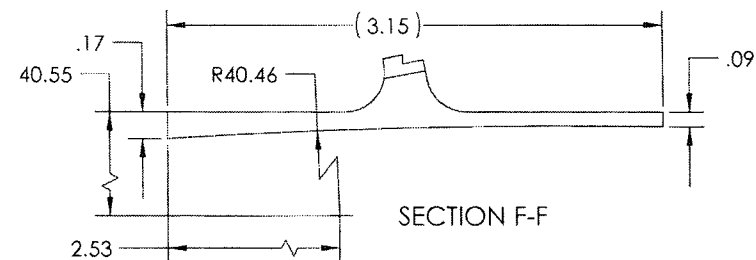
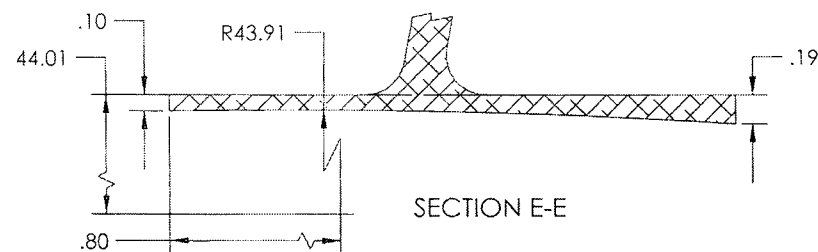
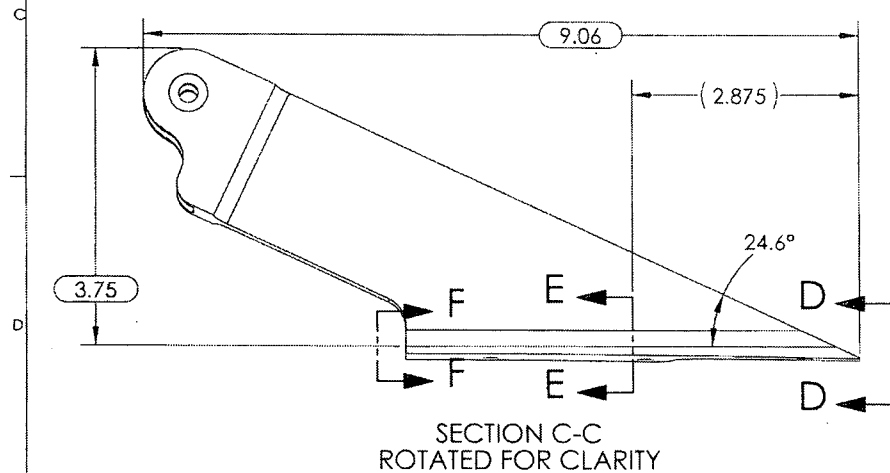
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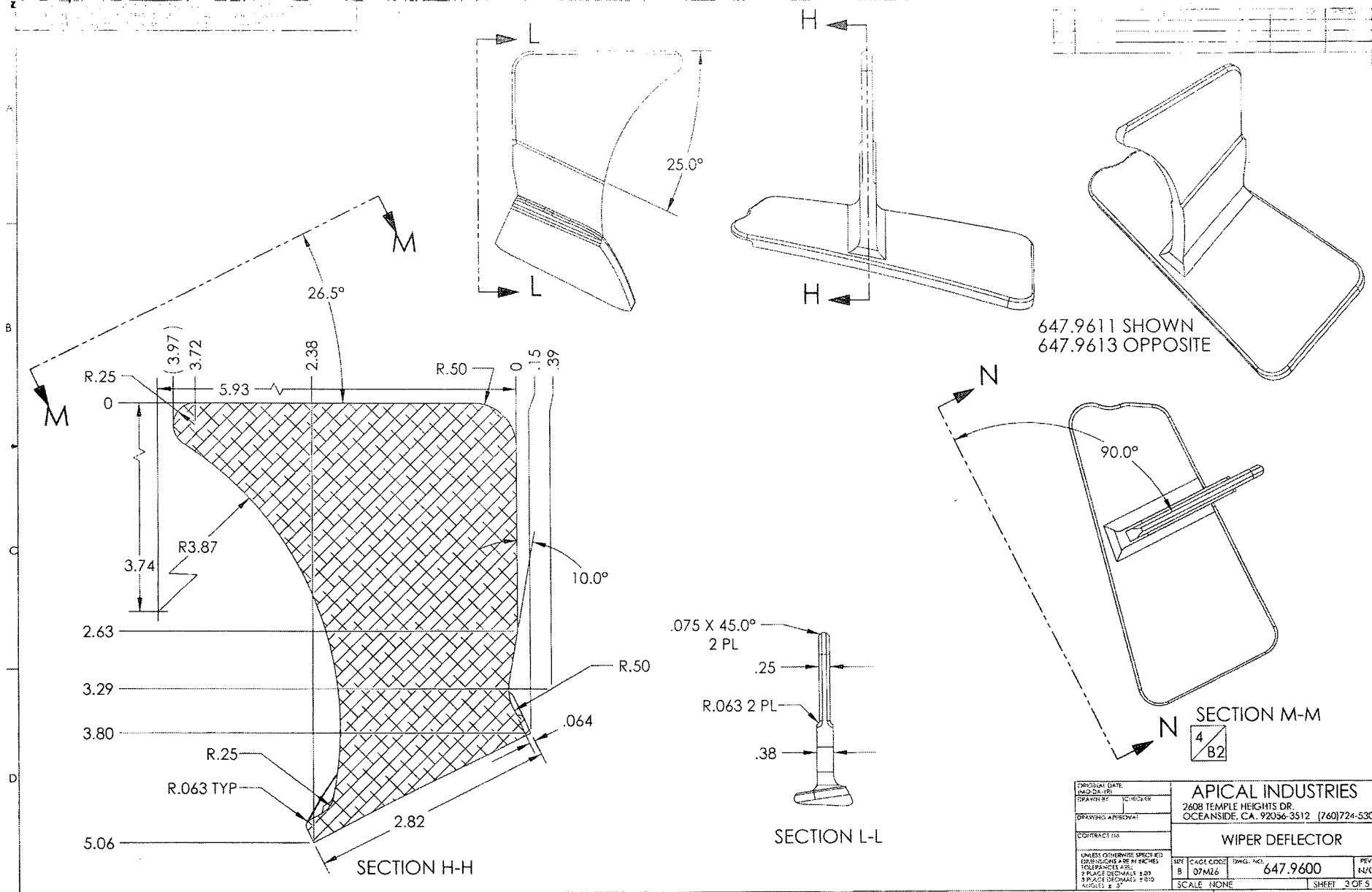
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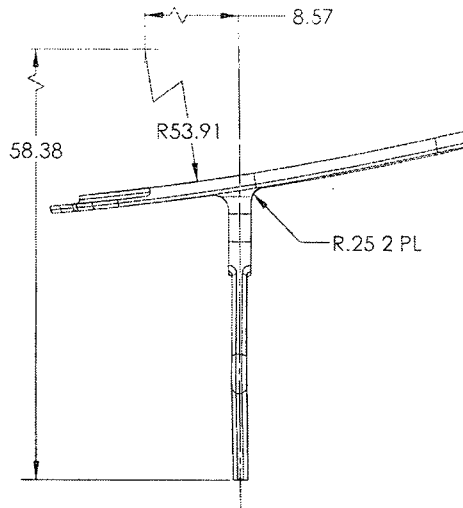
ORIGINAL DATE (MM/DD/YY)		APICAL INDUSTRIES	
DRAWN BY		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300	
CHECKER			
CONTRACT NO.		WIPER DEFLECTOR	
USES OVERSIZE SPECIFIED OVERSIZES ARE IN INCHES OVERSIZES ARE: 2 PLACES OVERSIZES ±0.1 2 PLACES OVERSIZES 1.000 ANGLES ± .5°		SIZE 6 07MA6	QTY 647.900
		SCALE NONE	SHEET 2 OF 5

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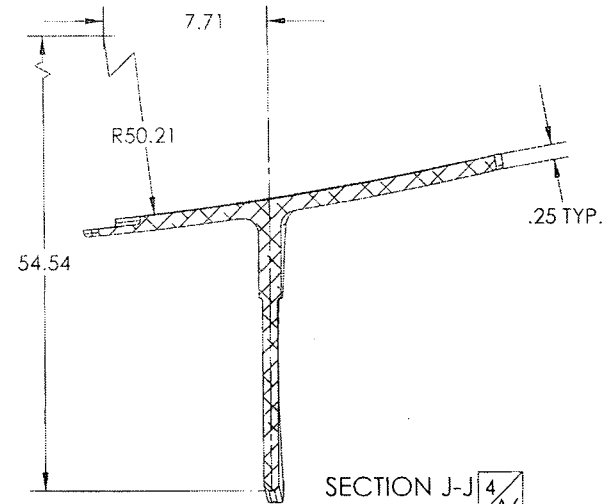


ORIGINAL DATE 10-20-1981		APICAL INDUSTRIES	
DRAWN BY T.C. HEDDER		2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL		OCEANSIDE, CA. 92036-3512 (760) 724-5300	
CONTRACT #16		WIPER DEFLECTOR	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .010 ANGLES ± .5°		SHEET CODE B 07M26	REV N/C
SCALE: NONE		647.9600	
		SHEET 3 OF 5	

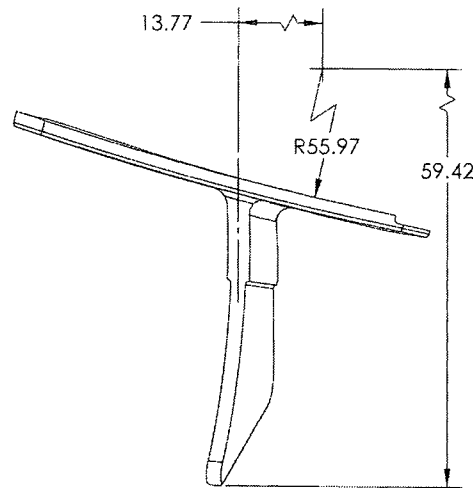
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SECTION I-I 4/B7



SECTION J-J 4/A6



SECTION K-K 4/B5

<small>           (DATE) DATE            (AUTH) AUTH            DRAWN BY            J. JACKSON            CHECKED BY            P. BRAVO            DRAWING APPROVAL            P. BRAVO            CONTRACT NO.         </small>		<b>APICAL INDUSTRIES</b> 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
<small>           UNLESS OTHERWISE SPECIFIED            DIMENSIONS ARE IN INCHES            TOLERANCES ARE            2 PLACE DECIMALS ± .01            3 PLACE DECIMALS ± .005            ANGLES ± .5°         </small>		SCALE NONE	REV. N/C
SIZE B	CAGE CODE 07M25	DWG. NO. 647.9600	SHEET 5 OF 5





2228 Gladwin Crescent  
Ottawa, Ontario  
K1B 4S6

Phone # 613-899-2405

# Packing Slip

Date	Invoice #
6/18/2013	566

Ship To
Main Finished Goods Location Dart Aerospace 1270 Aberdeen Street Hawksbury, Ontario K6A 1K7

P.O. No.	Ship	Via	FOB	Project
19893	6/18/2013	FedEx	Archer	

Qty	Item Code	Description
5 ✓	Sales	647.9613 RH Aft Wiper Deflector HST (ON) on sales  SOP-6-21





2228 Gladwin Cres.  
Ottawa, Ont.  
K1B 4S6

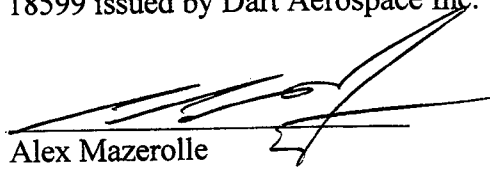
Telephone (613) 899-2405  
Fax (613) 226-1719

## Certificate of Compliance

To:  
Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury Ont.  
K6A 1K7

Po Number	Part Number	Quantities
19893	647.9613	5

It is hereby certified that all articles mentioned above are in conformance with the requirements, specification and drawings as listed on customer purchase order number, 18599 issued by Dart Aerospace Inc.

  
Alex Mazerolle  
President

Archer Precision Inc.  
2228 Gladwin Cress.  
Ottawa, Ontario  
K1B 4S6



# Inspection Report

Customer Name	QTY	DWG #	REV.	Part Name	Date	Lot#	Job #
Dart Aerospace	5	647.9613	N/C	WIPER DEFLECTOR			770

Page 1 of 2

Inspection Interval

Special Notes

Item #	DWG. Dim	Tolerance	Operator	QA First		QA Final		1	2	3	4	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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Date of Issue July, 13, 2005.



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO19893

Purchase Order Date 5/15/2013

PO Print Date 5/15/2013

Page Number 1 of 2

Order From :

ARCHER PRECISION INC.  
2228 GLADWIN CRESENT  
OTTAWA, ON K1B 4S6  
CA

VC-GLO001

Contact Name

Vendor Phone 613 899 2405

Vendor Fax

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270  
HAW  
CANA

EEN  
RY, ON K6A 1K7

**FAKED**  
08/30/10

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Exter I
1	647.9312P ✓	Bracket	6/14/2013 Yes	8.00 Each	Day & Ross coll	\$190.0000	\$1,5
		Special last. MACHINE AS PER DWG 647.9312 B100486					
2	647.9613P ✓	RH Aft Wiper D	6/14/2013 Yes	5.00 Each	Day & Ross coll	\$340.0000	\$1,7
		Special last. MACHINE AS PER DWG 647.9613 B98929					
3	647.9314P	Retainer Bracket	6/14/2013 Yes	30.00 Each	Day & Ross coll	\$252.5690	\$7,5
		Spe. MACHINE AS PER DWG 647.9314 B94686					
4	647.9315P	Receptacle Bracker	6/14/2013 Yes	30.00 Each	Day & Ross coll	\$289.5426	\$8,6

No substitution or deviation without  
consent.

Certificate of Conformity or Material  
Certification required **YES** NO

Change Nbr: 1

Change Date: 5/15/2013

## Chantal Lavoie

---

**From:** Alex Mazerolle <alex@archerprecision.ca>  
**Sent:** Tuesday, June 25, 2013 1:19 PM  
**To:** Chantal Lavoie  
**Subject:** RE: info

Good afternoon Chantal,

I do remember those two parts. The material was short for some reason. We tagged them to make sure you saw them and sent them along. I can redo the invoice if you like. Just send me the invoice number.

*Alex Mazerolle*



*President*

*Tel: 613-226-1579*

*Fax: 613-226-1719*

---

**From:** Chantal Lavoie [<mailto:clavoie@dartaero.com>]  
**Sent:** Tuesday, June 25, 2013 1:15 PM  
**To:** Alex Mazerolle <[alex@archerprecision.ca](mailto:alex@archerprecision.ca)> ([alex@archerprecision.ca](mailto:alex@archerprecision.ca))  
**Subject:** info

Hi Alex,

We have rec'd p/o:19893 for item 647.9613, but my qc inspector says that there 2 pcs that is scrap.

Not sure why but do you remember if there was 2 pcs scrap.

Please advise.

Thanks

Chantal



A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada  
Ph: (613) 446-4544  
Fax: (613) 446-4556

### Pack List

Number: 62493

Date: 10-Jul-13

#### To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

#### Ship To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
38 ea	Part: 647.9613  HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2  PRIME MIL-P-23377J TYPE I CLASS N Job: 20130419  Rev:  Line:		
<p align="center">Certificate of Conformance</p> <p>A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.</p> <p align="center">ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY</p> <p>DATE : <u>10/7/13</u></p> <p>CERTIFIED SIGNATURE : _____</p> <p>RECEIVER SIGNATURE : _____</p> <p align="right"><i>M. Hecosse</i></p>			